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**TRANSMITTAL
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Application Number	09/818,851
Filing Date	03/28/2001
First Named Inventor	Susumu Yoshiwara
Art Unit	3635
Examiner Name	Amiri, Nahid
Attorney Docket Number	

Total Number of Pages in This Submission

35

ENCLOSURES (Check all that apply)

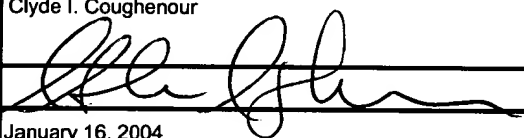
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| <input checked="" type="checkbox"/> Fee Transmittal Form
<input checked="" type="checkbox"/> Fee Attached
<input type="checkbox"/> Amendment/Reply
<input type="checkbox"/> After Final
<input type="checkbox"/> Affidavits/declaration(s)
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<input type="checkbox"/> Certified Copy of Priority Document(s)
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Firm or Individual name	Clyde I. Coughenour
Signature	
Date	January 16, 2004

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FEE TRANSMITTAL for FY 2003

Patent fees are subject to annual revision.

☒ Applicant claims small entity status. See 37 CFR 1.27.

TOTAL AMOUNT OF PAYMENT (\$)**165.00**

Complete if Known

Application Number: **09/818,851**
Filing Date: **March 28, 2001**
First Named Inventor: **Susumu Yoshiwara**
Examiner Name: **Amiri, Nahid**
Art Unit: **3635**
Attorney Docket No.:

METHOD OF PAYMENT (check all that apply)

☒ Check ☐ Credit card ☐ Money Order ☐ Other ☐ None

☒ Deposit Account:

Deposit Account Number
Deposit Account Name

03-3382

Clyde I. Coughenour

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☐ Charge fee(s) indicated below ☒ Credit any overpayments

☒ Charge any additional fee(s) during the pendency of this application

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FEE CALCULATION

1. BASIC FILING FEE

Large Entity Fee Code (\$)	Small Entity Fee Code (\$)	Fee Description	Fee Paid
1001 740	2001 370	Utility filing fee	
1002 330	2002 165	Design filing fee	
1003 510	2003 255	Plant filing fee	
1004 740	2004 370	Reissue filing fee	
1005 160	2005 80	Provisional filing fee	

SUBTOTAL (1) (\$)

2. EXTRA CLAIM FEES FOR UTILITY AND REISSUE

Total Claims	Extra Claims	Fee from below	Fee Paid
Independent Claims	-20** =	X	
Multiple Dependent Claims	-3** =	X	

Large Entity Fee Code (\$)	Small Entity Fee Code (\$)	Fee Description
1202 15	2202 9	Claims in excess of 20
1201 64	2201 42	Independent claims in excess of 3
1203 280	2203 140	Multiple dependent claim, if not paid
1204 64	2204 42	** Reissue independent claims over original patent
1205 18	2205 9	** Reissue claims in excess of 20 and over original patent

SUBTOTAL (2) (\$)

**or number previously paid, if greater; For Reissues, see above.

FEE CALCULATION (continued)

3. ADDITIONAL FEES

Large Entity Fee Code (\$)	Small Entity Fee Code (\$)	Fee Description	Fee Paid
1051 130	2051 65	Surcharge - late filing fee or oath	
1052 50	2052 25	Surcharge - late provisional filing fee or cover sheet	
1053 130	1053 130	Non-English specification	
1812 2,520	1812 2,520	For filing a request for ex parte reexamination	
1804 920*	1804 920*	Requesting publication of SIR prior to Examiner action	
1805 1,840*	1805 1,840*	Requesting publication of SIR after Examiner action	
1251 110	2251 55	Extension for reply within first month	
1252 400	2252 200	Extension for reply within second month	
1253 920	2253 460	Extension for reply within third month	
1254 1,440	2254 720	Extension for reply within fourth month	
1255 1,960	2255 980	Extension for reply within fifth month	
1401 320	2401 160	Notice of Appeal	
1402 320	2402 160	Filing a brief in support of an appeal	
1403 280	2403 140	Request for oral hearing	
1451 1,510	1451 1,510	Petition to institute a public use proceeding	
1452 110	2452 55	Petition to revive - unavoidable	
1453 1,280	2453 640	Petition to revive - unintentional	
1501 1,280	2501 640	Utility issue fee (or reissue)	
1502 460	2502 230	Design issue fee	
1503 620	2503 310	Plant issue fee	
1460 130	1460 130	Petitions to the Commissioner	
1807 50	1807 50	Processing fee under 37 CFR 1.17(a)	
1806 180	1806 180	Submission of Information Disclosure Sheet	
8021 40	8021 40	Recording each patent assignment per property (times number of properties)	
1809 740	2809 370	Filing a submission after final rejection (37 CFR 1.129(a))	
1810 740	2810 370	For each additional invention to be examined (37 CFR 1.129(b))	
1801 740	2801 370	Request for Continued Examination (RCE)	
1802 900	1802 900	Request for expedited examination of a design application	

Other fee (specify)

*Reduced by Basic Filing Fee Paid

SUBTOTAL (3) (\$)**165.00**

SUBMITTED BY

Name (Print/Type)	Clyde I. Coughenour	Registration No. (Attorney/Agent)	33,083	Telephone	703-221-8677
Signature		Date	January 16, 2004		

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE



In re Application of: Yoshiwara et al

Appeal No. _____

Serial No.: 09/818,851

Group Art Unit: 3635

Filed: March 28, 2001

Examiner: Amiri, Nahid

For: Manufacture and Use of Earthquake Resistant Construction Blocks

APPEAL BRIEF

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Commissioner for Patents
P.O. Box 1450
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Honorable Members of the Board of Patent Appeals and Interferences:

The jurisdiction of the Board is invoked under 35 USC 134 and 37 CFR 1.191.

A Notice of Appeal was filed 23 December 2003 with payment. A payment of \$165.00 is filed herewith to cover the filing of this brief for a small entity. Both the Notice of Appeal and the Appeal Brief are timely filed.

Claims on Appeal

This is an appeal from the decision of the Patent Examiner finally rejecting claims 1, 8-16 and 19 in an Office Action dated 24 September 2003.

01/20/2004 CNGUYEN 00000083 09818851

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165.00 OP

Real Party of Interest

Hotsuma Koubou Corporation. Mailing address: 2850-1-602 Kamitsuruma, Sagamibara-shi, Kanagawa-ken, Japan.

Related Appeals and Interferences

There are no known related appeals or interferences.

Status of Claims

Claims 1-19 are pending in this application. Claims 1, 8-16 and 19 have been rejected and are the subject of this appeal.

A. Claim 1 is rejected under 35 USC 112, second paragraph, as being indefinite because the preamble is to an earthquake resistant structure but only a single construction block is being claimed.

B. Claims 14-16 are rejected under 35 USC 112, second paragraph, as being indefinite because "it appears applicant claiming the method of forming the blocks plus method of making a structure using the block."

C. Claims 1, 8-13 and 19 are rejected under 35 USC 103(a) as being unpatentable over Kirkpatrick (U.S. Patent No. 1487578).

D. Claims 2-7 and 14-18 have been determined to contain allowable subject matter but depend from rejected claims.

Status of Amendments

There are no pending amendments.

Summary of the Invention

The invention, as set forth on page 1 "Field of the Invention" and as seen in Fig.10 and described in the amendment filed 11 August 2002 and entered on page 16 after line 17, teaches the manufacture and use of earthquake resistant blocks 101 that can be less expensive aggregate materials 105 placed in close firm contact with each other in the base of the block extending from one side to the other side of the block so that in use the aggregate materials of adjacent blocks are in contact with each other and transfer forces created by shaking of the earth.

The Issues Are

A. Whether claim 1 is indefinite under 35 USC 112, second paragraph, because a single block is being claimed under the preamble an earthquake resistant structure.

B. Whether claims 14-16 are indefinite under 35 USC 112, second paragraph, because it appears to the Examiner that the claims include the method of forming the blocks and the method of making a structure using the blocks.

C. Whether claims 1, 8-13 and 19 are obvious under 35 USC 103(a) in view of the patent to Kirkpatrick.

Grouping of the Claims

- A. Independent article claim 1 is seen to be independently patentable.
- B. Article claims 8-12, depending from claim 1, are seen to be independently patentable in that materials not commonly used as the base for bridge-supporting blocks are recited.
- C. Independent process claim 13 is seen to be independently patentable.
- D. Process claim 19, depending from claim 13, is seen to be independently patentable in that materials not commonly used are selected.

Arguments

The claims are all believed to be definite and contain patentable subject matter.

35 USC 112 REJECTION

Claims 1 and 14-16 have been rejected under 35 USC 112, second paragraph, as being indefinite.

Claims 1 and 14-16, essentially as originally filed, were rejected for the first time in the FINAL REJECTION mailed 09/24/2003 under 35 USC 112, second paragraph. It is assumed that the applicants response to the final rejection was read, although that is in doubt. Your appellant responded to this new grounds of rejection on November 12, 2003 and specifically listed three reasons with extensive explanations why the rejection was not appropriate. The response was summarily dismissed or ignored as in the Examiner's response the only opinion stated was

that the response did not place the application in condition for allowance because Kirkpatrick '578 in Fig. 1 discloses aggregate pieces extending within the lower surface and between block sides and pieces are contacted with each other. The new grounds of rejection under 35 USC 112 and several problems with the 35 USC 103(a) rejection were not addressed. A specific request to review the 35 USC 112 rejection was made in an effort to reduce the issues on appeal. In view of this non-response it must be assumed that the 35 USC 112 rejection is adhered to and thus the reasoning for its traverse is essentially repeated herewith.

Claim 1

Claim 1 is considered indefinite by the Examiner because the preamble is for an earthquake resistant structure when only a single construction block is being claimed.

By implication, a single block is not a structure and/or cannot be earthquake resistant, and thus to claim a single block is indefinite. This rejection is not logical or legally supportable. If a single block does not meet the criteria of the preamble, being earthquake resistant, then how/why can two or more blocks in combination be earthquake resistant? It is the structure of each individual block that yields their individual as well as their collective earthquake resistance, such as their use in a bridge. A "structure" by dictionary definition is simply something made of parts fitted or joined together, and the way in which constituent parts are fitted or joined together, or arranged to give something its peculiar nature or character. Each block includes aggregate and mortar holding the aggregate in place. A single block as defined in the specification, e.g. the Abstract, meets the definition.

The title of the invention reads “Manufacture and Use of Earthquake Resistant Construction Blocks.” In the “Field of the Invention” it states that construction blocks are manufactured independently or in place. The block construction is detailed on pages 8 and 9, for example, with the repeated construction of individual blocks detailed on page 14.

Claiming one block is at worst a subcombination of two blocks. It is firmly established law that an applicant can claim his invention as broadly as permitted by the prior art. The fact that a claim is broad does not necessarily justify a rejection on the ground that the claim is vague and indefinite or incomplete. In non-chemical cases, a claim may, in general, be drawn as broadly as permitted by the prior art. As set forth in MPEP 706.03(d) 1, 2 and 8, the claim directed to patentable subject matter should be allowed when the claims are defined with a reasonable degree of particularity and distinctness. Some latitude in the manner of expression and the aptness of terms should be permitted even though the claim language is not as precise as the Examiner might desire. A claim may be drawn as broadly as permitted by the prior art. In a mechanical case, broad claims may be supported by a specific embodiment and an inventor need not limit his claims to precisely what he has found will work to ease the path of a would be infringer. Beale vs Schuman, 212 USPQ 291 (BdPAI 1980).

It is the inventor applying for a patent who is permitted to be his own lexicographer as long as the meaning of an expression is made reasonably clear and its use is consistent within the patent disclosure. Ellipse Corp. v Ford Motor Co., 171 USPQ 513, (CA 7 1971). To use a

preamble that does not define the invention as being an earthquake resistant block might be confusing, but as used it is only being consistent with the invention as disclosed.

In Ex parte Adrianus P.M.M. Moelands, 3 USPQ 2d 1474 (BdPAI 1987), the Board pointed out that 35 USC 112, second paragraph, merely requires that the claims set forth and circumscribe a particular area with a reasonable degree of precision and particularity. The definiteness of the claim language employed must not be analyzed in a vacuum, but always in the light of the teaching of the prior art and of the particular application disclosure as it would be interpreted by one having ordinary skill in the pertinent art. In this decision the Board was applying firmly established patent law that is just as applicable here as it was there. Further examples are: In re Moore, 169 USPQ 236 (CCPA 1971); Ex parte Kristensen, 10 USPQ 2d 1701 (Bd PAI 1989); Radio Steel & Mfg. v. M T Products, 220 USPQ 35 (Ohio DC 1982); Antonious v. Pro Group, 217 USPQ 875 (6th Cir 1982); Ortho-Kinetics, 1 USPQ 2d 1088 (Fed Cir 1986); Hybritech, 231 USPQ 81 (CAFC 1986)

Claim 1 is definite and in compliance with the requirements of 35 USC 112, second paragraph. It is an applicant's prerogative to define the invention and the Examiner has not presented reasoning or otherwise explained why the preamble renders claiming a single block indefinite.

Claims 14-16

Claims 14-16 have been rejected, under 35 USC 112, second paragraph, because it appears both a method of forming the “blocks” and a method of making a structure using the “block” is being claimed.

As previously noted, pages 8 and 9 of the specification, for example, address block formation and page 14 addresses the formation of an arch. The formation of the arch includes providing a mold and using it to form a block with the aggregate and mortar and then removing or separating the mold and block (claimed in claim 13). Additional blocks are formed in contacting relationship by either forming them in place or separately and placing them side by side (claims 14-16). In either case, construction blocks are being formed. The Examiner has confused the claiming of a sub-combination with claiming different categories or classes of inventions. Claims 13-16 are all directed to the steps used for forming construction blocks. The fact that more than one block can be formed or used in one formation is irrelevant. It is to be noted that the preamble for all the claims is for the “process of forming construction blocks” (emphasis added), i.e. one or more than one. Fig. 10 and the description thereof clearly disclose the concurrent manufacture of blocks and the formation of a structure. There is seen to be no confusion or indefiniteness associated with the procedures disclosed there that the mechanic in the art would not understand.

The rejection fails because it has not shown the claims to be indefinite and does not meet adjudicated principles for 35 USC 112, second paragraph, claim rejections. Insofar as the rejection is understood:

1) Even if a claim is considered to be drafted in unconventional narrative form, the metes and bounds of the claims are defined with a reasonable degree of particularity, and are thus not indefinite under the second paragraph of 35 USC 112. In re Miller, 169 USPQ 597 (CCPA 1971), In re Borkowski, 164 USPQ 642 (CCPA 1970).

2) Even if claims are considered to be drawn in functional or narrative form, the issue is whether they set forth reasonable boundaries upon which patent protection is sought. In re Barr, 170 USPQ 330 (CCPA 1971), In re Swinehart, 169 USPQ 226 (CCPA 1971).

3) Claim limitations which cover two or more statutory classes of invention under 35 USC 101 are not precluded by the statute. There is no need to speculate as to the meaning of the claims. In re Steele et al, 134 USPQ 296 (CCPA 1962).

4) The fact that a claim may be broader than the specific embodiment disclosed in a specification is in itself of no moment. In re Rasmussen, 211 USPQ 323 (CCPA 1981).

5) An applicant is entitled to claim a sub-combination. Where a claim to a combination includes one or more element that is by itself non-obvious, the entire claim meets the unobviousness test. In re Hirao, 190 USPQ 15 (CCPA 1976). A claim need not recite each and every element needed for practical utilization of claimed subject matter. Sub-combination claims drawn to only one aspect or combination of elements that has utility separate and apart from other aspects of the invention are appropriate. Carl Zeiss Stifling v Renshaw, 20 USPQ 2d 1994 (CCPA 1976).

Again, as set forth with respect to the 35 USC 112, second paragraph, rejection of claim 1, this statutory provision merely requires that the claims set forth and circumscribe a particular

area with a reasonable degree of precision and particularity. The definiteness of the claim language employed must not be analyzed in a vacuum, but always in light of the teachings of the prior art and of the particular application disclosure as it would be interpreted by one having ordinary skill in the particular art. The examiner should allow claims which define the patentable novelty with a reasonable degree of particularity and distinctness. Some latitude in the manner of expression and aptness of terms should be permitted even though the claim language is not as precise as the examiner might desire. (MPEP § 706.03(d)).

There has been no reasonable showing that the mechanic in the art would not understand the meets and bounds of the claims or that the claims are not definite within the authoritative guidelines for rejections under 35 USC 112, second paragraph. There is nothing prohibiting one claimed article from being used with an article that is the same or a process for making one article from being used to make a second article that is a duplicate of the first.

The claims 14-16 are definite and in compliance with 35 USC 112, second paragraph. Each of the process steps recited in the claims is to the formation of construction blocks and there has been no showing that the wording would not be understood by the mechanic in the art.

35 USC 103 REJECTION

Claims 1, 8-13 and 19 are rejected under 35 USC 103(a) as being unpatentable over Kirkpatrick. The Examiner has not made a logical or convincing case that shows the claims to be obvious.

As understood, the Examiner considers allowable the subject matter where two blocks are used together and rejected claims where only one block is being claimed. It is assumed that the aggregate pieces extending to the end of the blocks is not sufficient to overcome the showing of Kirkpatrick in Fig. 1, but when the sides of two blocks are placed adjacent each other with the aggregate pieces of two blocks in contact with each other, the Kirkpatrick showing is overcome because the Kirkpatrick aggregate 10 in the different blocks A do not come close to each other when placed side by side as shown in Fig. 2.

An earthquake resistant structure is being claimed. Whether a single block or a combination of blocks, the block structure remains the same. A single block composed of individual components is as capable of earthquake resistance as two or more blocks, if not more so. An applicant is entitled to claim his invention as broadly as permitted by the prior art. The Examiner's distinguishing a single block from two blocks does not diminish the patentability of a new, novel and unobvious single block per se.

- i. The invention and Kirkpatrick are for different purposes.

The invention teaches the manufacture and use of earthquake resistant blocks, that can use less expensive materials, with aggregate pieces placed in close contact with each other in the base of the block extending from one side to the other side of the block so that in use the aggregate materials in contact transfer forces created by shaking of the earth, whether within a single block or between blocks (Abstract).

Kirkpatrick teaches the manufacture and use of a building block A provided with a crushed rock 10 veneer face for decoration of a vertical wall face. The rocks are placed into a mold followed by smaller rocks and concrete with reinforcing rods. Kirkpatrick teaches that the block is “provided with reinforcement elements to afford the block maximum strength” with “tie wire for holding the blocks in position” (lines 12-16). The invention resides “in the construction, combination, and arrangement of parts” (lines 21-23). The structure of Kirkpatrick precludes any forces from being applied to the rocks.

- ii. The aggregate of Kirkpatrick is used differently from that of the invention where the aggregate is placed in the base.

The rocks 10 of Kirkpatrick are not in the lower surface, they are on the front face.

Kirkpatrick teaches: A building block “provided with a crushed rock veneer face” (lines 9-16). “The crushed rock or the like is placed in a form and the crevices between the rocks are filled with smaller rocks after which the cement is poured into the form.” (lines 43-46). The

reinforcement elements 16 and 17 are embedded in the cement with spaced eyes or loops 18 projecting from the rear face of the block to accommodate tie wires 19 (lines 46-56) that hold the blocks in position upon the wall as shown (lines 59-63).

It is the applicant who defines the invention and terms used. The Examiner is not at liberty to redefine the invention or to interpret the invention in conflict with those set forth by the applicant. The Examiner has opined that the chamfer of Kirkpatrick is in fact sides even though Kirkpatrick states that the rocks are in the front face of the block.

An article of manufacture is being claimed, i.e. an earthquake resistant block. The aggregate is on the lower surface. The “aggregate” of Kirkpatrick is not on a lower surface as set forth above. Further evidence that belies the Examiner’s opinion that Kirkpatrick has aggregate on the lower surface is the fact that Fig. 1 is a longitudinal sectional view while Fig. 2 is a vertical sectional view taken through a wall. As can be seen in Fig. 2, only concrete is present on the upper surface and lower surface with the aggregate front face of the block protruding outward from the wall.

The Examiner’s interpretation is conclusively precluded by the inventor’s description that specifically defines the rear of the veneer face. As clearly stated by Kirkpatrick in lines 46-49 “The reinforcing element 16 is arranged in the cement to extend longitudinally of the block and immediately adjacent the veneer face” (emphasis added). Since the reinforcing element 16 extends adjacent the rear face of the block and extends longitudinally along the innermost extent

of the veneer face chamfers, the chamfer and everything within it is clearly disclosed by the inventor as all being a part of the veneer face 10.

iii. The aggregate extent of Kirkpatrick is different from that of the invention that extends from side to side.

Claim 1 requires a “construction block ... having... an upper surface and a lower surface and side surfaces” and “aggregate pieces ... adjacent to said lower surface” and “said aggregate pieces extending from and between said construction block sides”. Claim 13 requires “positioning said aggregate pieces within said mold ... so that said aggregate pieces are in firm contact with said mold sides and in firm contact with each other throughout said mold.”

The rocks of Kirkpatrick do not extend between the side surfaces. As shown in Fig. 2, the sides of the blocks abut each other but the rocks adjacent the front faces of the blocks do not. There are no horizontal forces placed on the blocks other than those created by the wires 19 that hold the rear face of the blocks onto the wall 20. The positioning of the rocks precludes the transfer of horizontal forces. The vertical forces are restricted to those created by gravity and they are transferred only through the cement in the blocks. The rocks in the face are far removed from both horizontal and vertical forces. If anything is involved with forces, it is the reinforcing elements 16 and 17.

In the Kirkpatrick claim, the “eyes” are stated to “project beyond one face of the block.” It is to be noted: “When the block is removed from the form, it requires no washing or any further

work, and it is ready to be placed upon the wall 20 as shown in Figure 1.” (Lines 56-59). As is clear from Fig. 1 and Fig. 2, the crushed rocks of the veneer face 10 of the blocks do not extend longitudinally to the ends of the block and do not extend vertically to a height or depth that is more than $\frac{1}{2}$ the depth of the chamfer on the ends of the block face. There is thus a clear, incontestable showing within the four corners of the patent to Kirkpatrick that the form used to manufacture the block has a face that includes about a 45 degree chamfer that extends into the form to a height twice the distance the crushed rocks are to be placed into it along the front face of the block.

The chamfers are not the sides, as can be clearly seen in Fig. 2 and described on lines 46-49, they are a part of the aesthetic front face of the block. The sides of Kirkpatrick abut and, when assembled, the chamfers and stone that together form the face protrude outward from the wall.

iv. The spacing of the aggregate in the invention is critical and is of no criticality in Kirkpatrick.

Claim 1 requires the aggregate to be in direct firm contact with each other. Claim 13 requires the aggregate to be positioned in firm contact with each other.

The Examiner has rejected the claims, based in part, not on facts of record, but on a personal interpretation of the showing of Kirkpatrick in Fig. 1. Kirkpatrick teaches that the block is provided with a crushed rock face with the rocks or the like placed in a form (lines 35-39 and

43-46). It is at best presumptuous on the part of the Examiner to “conclude” that the rocks of Kirkpatrick are in direct contact with one another by simply viewing Fig. 1. Fig. 1 is a longitudinal sectional view. The horizontal depth of the rocks is not clear. There is no top view. It is not clear that all the rocks are in contact with each other. For example, counting from the left in Fig. 1, it is not clear that the fourth and fifth rocks or seventh and eighth rocks or eleventh and twelfth rocks are in contact and the sixth and seventh appear to be separated by some distance.

Claim 1 requires: “said aggregate pieces held in contact with each other by mortar so that impact and stress forces applied to said construction block are transferred directly from one aggregate piece to another throughout said construction block.” Claim 13 requires the same firm contact between the aggregate.

Nowhere in the Kirkpatrick reference is it taught that the rocks in the block face are in contact with each other. Nowhere in the Kirkpatrick reference is there disclosed any need for the rocks to be in contact with each other. The existence of any specific type contact between the aggregate pieces in Kirkpatrick, if in fact there is any contact, would appear to be pure conjecture on the part of the Examiner.

v. The aggregate materials of the invention can be varied depending only on the ability to transfer forces while those of Kirkpatrick only need to be visually attractive with force transfer ability irrelevant.

The present invention is clearly drawn to the concept that some of the materials being used in the past, i.e. slag, concrete chips, Sirasu, etc., have been considered by mechanics in the art to be unacceptable. The fact is that the claims 8-12, for the most part, teach the direct opposite from those of Kirkpatrick. The statement “rock or the like” is precisely the class of materials your applicant is trying to be able to avoid use of. While rocks can be used in the present invention, since they are not always readily available and are often relatively quite expensive, the less desirable materials have been found to be acceptable.

Attention is directed to page 1, Field of the Invention, Page 3, Summary, lines 10-16, of the specification as one of the several places where the state of the art is addressed, stating the low quality materials to normally be discarded and disposed of because they are not considered acceptable. It is incumbent upon the examiner to show by independent evidence and established facts that this is false.

Application of the Law

The 35 USC 103(a) rejection on obviousness, in view of the patent to Kirkpatrick, fails in view of the following established legal principles:

The Examiner has rejected claim 1 because Kirkpatrick teaches the claimed structure and claims 8-13 and 19 as it would be “within the general skill of a worker in the art to select a known material on the basis of suitability for the intended use as matter of obvious design choice.”

(Emphasis added.) The Examiner is making this statement based on her diminution of the claims and misinterpretation of or failure to understand the invention.

- A. The patent to Kirkpatrick is to a non-analogous art.
- B. The present claims preambles distinguish the inventions.
- C. The rejection fails to make out a *prima facie* case of obviousness.
- D. The rejection fails to render the claimed structure obvious.
- E. The rejection fails to address functional limitations recited within the claims.
- F. The Examiner has had to resort to modifying the teachings of Kirkpatrick to reject the claims.
- G. The patent to Kirkpatrick teaches away from the claimed invention structure.
- H. The purpose, function and problems addressed by Kirkpatrick are different from those of the invention.
- I. Personal opinions and erroneous interpretations have been substituted for facts of record.
- J. The rejection is based solely on a hindsight rejection that of necessity relies on the teachings of your appellant's disclosure.
- K. The rejection is based on conjecture, not facts of record.

- A. The patent to Kirkpatrick addresses a non-analogous art.

Claim 1 is drawn to an earthquake resistant structure. Claim 13 is drawn to a process for formation of the earthquake resistant structure. The instant invention is to a block for horizontal stress transmission using aggregates. The Kirkpatrick block is to a vertical stress-free wall decorative facing. The patent to Kirkpatrick is directed to a non-analogous art and is thus not

legally available as a reference against the present claims. An earthquake resistant structure having horizontal force transmission is not analogous to a decorative block having a vertical, aesthetic, crushed-rock veneer face.

When a reference is neither from applicant's field of endeavor nor reasonably related to the particular problem with which applicant is involved, the reference is a non-analogous art. A two-fold test has been set forth. The first is to determine if the reference is within the inventors field of endeavor. The second is to determine if the problem of the invention is pertinent. In re Wood, 202 USPQ 171 (CCPA 1979). Neither the field of endeavor nor the problem addressed by the present invention is found in the Kirkpatrick reference.

B. The claim preamble alone precludes a 35 USC 103(a) rejection based on the teachings of Kirkpatrick.

The Kirkpatrick claim is to "The combination with a building block having a crushed rock veneer face." The present invention as stated in its claim preamble is to "an earthquake resistant structure." Claim 13 is to the process of forming construction blocks to resist earthquakes. The Examiner has ignored the preamble and its inherent art class designation. All limitations, including the preamble, must be considered. In re Duva, 156 USPQ 90 (CCPA 1967). The preamble is deemed to be a part of the claim when necessary to breath life and meaning into the claims Corning Glass Works v. Sumitomo Electric USA, 868 F2d 1251 (Fed Cir 1989). The preamble limits the prior art that is pertinent. Freund Industrial v. Driam Metall-Product G mb H Co KG, (DC SNY 1989).

C. The Examiner has failed to make out a *prima facie* case for obviousness. The invention function, earthquake resistance, and structure, including aggregate placement and extent of the aggregate, and overall intention for use of the structure, preclude making a valid *prima facie* rejection using Kirkpatrick as a reference. The rejection requires a modification of Kirkpatrick.

The claimed invention and teachings of Kirkpatrick do not have the same function. A rejection cannot be sustained when the prior art is incapable of functioning as required by the claims and achieving what is achieved by the invention. When this situation exists, the Examiner has failed to make out a *prima facie* case. Ex parte Gould, 231 USPQ 943(Bd PAI 1986). To reject the claims, the Examiner has resorted to modifying the teachings of Kirkpatrick. To modify a reference there must be a suggestion within the prior art. A modification is not obvious nor does it establish *prima facie* obviousness unless the prior art suggests the desirability of the modification. In re Gordon, 221 USPQ 1125 (CAFC 1984); In re Lalu, 223 USPQ 1257 (FedCir 1984). The obviousness of a claim must be made in light of all the evidence. A reference must establish a *prima facie* case of obviousness by consideration of the entirety of the prior art disclosure. In re Rinehart, 189 USPQ 143 (CCPA 1976).

D. The structure taught by Kirkpatrick is different from the structure claimed. The patent to Kirkpatrick does not teach aggregate extending on the base, or lower surface, or aggregate extending from one side to the other, or aggregate all in contact throughout the block base.

In summary, Kirkpatrick fails to teach the claim structure.

1. The stones of Kirkpatrick are not on the lower surface, they are on and form a part of a vertical face. This is clear in that:
 - a) Kirkpatrick states the crushed rocks form a veneer face.
 - b) The drawings show that they are on the front face.
2. The stones of Kirkpatrick do not even extend to the rear of the veneer face.
 - a) The disclosure precludes the rocks from reaching the rear of the front face.
 - b) The arrangement of the components of the face show that the rocks only extend about $\frac{1}{2}$ way to the rear of the veneer face.
3. The stones of Kirkpatrick do not extend to the sides of the block.
 - a) The disclosure precludes the rocks from extending from one side to the other.
 - b) The arrangement of the blocks on a wall demonstrates that the rocks do not extend to the sides.
4. The stones of Kirkpatrick are not positively in contact with each other.

It is well established that the initial burden of establishing a basis for denying patentability to a claimed invention rests upon the Examiner. In re Fine, 5 USPQ 2d 1596 (FedCir 1988); In Re Thorpe, 227 USPQ 946 (Fed. Cir. 1985); In re Piasecki, 223 USPQ 785 (FedCir 1984). In rejecting claims under 35 USC 103, it is incumbent upon the Examiner to establish a factual basis to support the legal conclusion of obviousness. In re Fine, supra; Stratoflex, Inc. v. Aeroquip Corp., 218 USPQ 871 (FedCir 1983); In re Warner, 154 USPQ 173 (CCPA 1967). A claimed device need not necessarily be better than the prior art. An applicant is entitled to a patent under the statutes unless one of the prohibitory provisions of the statutes applies. The statutory requirements are novelty, usefulness, and unobviousness as provided in 35 USC 101, 102 and

103. In re Ratti, 123 USPQ 349 (CCPA 1959). When novel features yield novel and useful results, a basis for patentability is established. In re Haas et al, 144 USPQ 98 (BdApp 1964).

E. The claims contain limitations that have been ignored in the rejection. The claims recite earthquake resistance, close firm contact of the aggregate, and aggregate to be located in the base of the block extending from side to side.

All limitations of a claim must be considered in determining the claimed subject matter. It is error to ignore specific limitations distinguishing over the reference. Ex parte Murph and Burford, 217 USPQ 479 (BdApp 1982); In re Boe, 184 USPQ 38 (CCPA 1974); In re Wilder, 166 USPQ 545 (CCPA 1970). Functional language must be considered. Ex parte Bylund, 217 USPQ 492 (BdApp 1981).

F. The Examiner has resorted to modifying the teachings of Kirkpatrick to reject the claims. The claim limitations that the aggregate extend in contact between the sides, in the base, can only be rejected based on Kirkpatrick by modifying the teachings of Kirkpatrick.

To use Kirkpatrick to reject base claims 1 and 13 requires modifications to Kirkpatrick that are not taught within the four corners of the patent. The rocks must be moved from the face to the lower surface, the rocks must be firmly placed together, and the rocks must extend beyond the chamfer. A modification of the prior art not taught by the reference cannot be relied on under 35 USC 102 or 103. Deering Milliken Research Corp. v. Beaunit Corp., 182 USPQ 421 (DCWNC 1974); In re Hummer, 133 USPQ 586 (CCPA 1970). Patents are references only for

what they clearly disclose or suggest. It is not proper use of a reference to modify its structure to one which prior art references do not teach. In re Randal et al, 165 USPQ 586 (CCPA 1999).

G. The Kirkpatrick patent teaches away from the presently claimed invention. Kirkpatrick teaches that the rock aggregate should be on the block face and that the aggregate should be used for aesthetic purposes.

The prior art as a whole must be considered. It is impermissible within the framework of section 103 to pick and choose from any one reference only so much of it as will support a given position, to the exclusion of other parts necessary to the full appreciation of what such reference fairly suggests to one of ordinary skill in the art. In re Hedges et al, 228 USPQ 685 (CAFC 1986). In re Wesslau, 147 USPQ 391 (CCPA

H. The Kirkpatrick reference addresses purposes, functions and problems that are foreign to those of the present invention. The purpose, function, and problem addressed by the invention is related to an earthquake resistant structure. The patent to Kirkpatrick is to make an aesthetic vertical wall face. The block of Kirkpatrick, itself, requires reinforcement support means.

Patentability may be involved in the discovery of a problem, the concept of a new improvement for solving a problem or the actual physical means for achieving the solution. In re Worrest, 96 USPQ 381 (CCPA 1953). A reference which is not directed to the same purpose and does not have the same inventive concept as claimed under consideration cannot be fairly applied in rejecting such claims. In re Luvisi and Nohejl, 144 USPQ 646 (CCPA 1965). Another approach to the same issue is that the prior art must address and provide the inventor's answer to

the particular problem confronting the inventor. In re Winslow, 151 USPQ 48 (CCPA 1966).

The structure of Kirkpatrick cannot function as the claimed structure does.

I. The Examiner has interpreted the Kirkpatrick reference based on personal opinion rather than evidence and facts of record. There is no disclosure or teaching that the rocks of Kirkpatrick are in contact with each other or that they extend to the sides of his blocks or that they are at the base of the block.

When it comes to reference interpretation, the examiner's "opinion" is of little worth. The reference teaches, or does not teach, the claimed structure. Either the reference must teach the structure claimed or the claim should be allowable. This concept is firmly established and consistently followed by the courts. As an example, it is the patent to Kirkpatrick that is directed to a design and aesthetic structure, not the present invention.

When the Patent Office finds, under 35 USC 103, differences between the subject matter sought to be patented and the prior art, it may not, without some basis in logic or scientific principle, merely allege that some differences are either obvious or of no patentable significance and thereby force an applicant to prove conclusively that it is wrong. The mere allegation that the differences between the claimed subject matter and the prior art are obvious does not create a presumption of unpatentability. In re Soli, 137 USPQ 797 (CCPA 1963). The ultimate legal conclusion of obviousness must be based on facts or records, not on the examiner's unsupported allegation that a particular structural modification is known and obvious. Subjective opinions are of little weight against contrary evidence. In re Wagner et al, 157 USPQ 552 (CCPA 1967).

More than an opinion or speculation and hindsight are required to reach a legal conclusion of obviousness. In re Sporck, 133 USPQ 360 (CCPA 1962).

J. The rejection so distorts the structure, function and facts of record that it can only be a hindsight rejection. The modifications made to the disclosure and showing of Kirkpatrick and unsupported interpretation of the aggregate of Kirkpatrick to reject the present claims can only be a hindsight rejection using the present disclosure as a guide to modify the Kirkpatrick patent.

It is clear that the Examiner's interpretation of the Kirkpatrick reference is based on a hindsight desire to reject the claims. The Examiner has substituted personal opinions for the clear unambiguous teachings of the prior art. The Examiner's opinion as to what the prior art teaches is in direct conflict with what the inventor of the prior art states his invention to be. The rejection is a classic example of why rejections must be based on facts found within the prior art and cannot be based on personal opinion or interpretation as to what the prior art teaches.

To imbue one of ordinary skill in the art with knowledge of the invention, when no prior art reference or references of record suggest that knowledge, is hindsight where that which only the inventor taught is used against its teacher. W. L. Gore & Associates v. Gorlock, Inc., 229 USPQ 303 (CAFC 1983). See also Ex Parte Fleischmann, 157 USPQ 155 (BdApp 1967) and In re Harry Sponnoble, 160 USPQ 237 (CCPA 1969).

K. The Examiner is rejecting the claims, at least in part, on pure conjecture and questionable probability as to the characteristics of the Kirkpatrick structure. There is no disclosure in

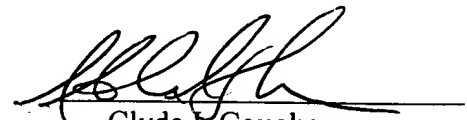
Kirkpatrick that the aggregate pieces are in contact with each other or that the pieces extend to the block sides.

A rejection cannot be predicated on mere conjecture as to the characteristics of the prior art. Ex Parte Standish, 10 USPQ 2d 1454 (Bd PAI 1988). Even the doctrine of necessary inherency (not present here) requires “certainty” not “mere probability.” Ethyl Molded Products v. Betts Packaging, 9 USPQ 2d 1001 (DCE Ky 1988). The reference to the Kirkpatrick disclosure does not even elevate his structure to being an “accidental disclosure” of the present claim structure. Pittsburgh Reduction v. Cowles, 55 F 301 (Cir NDOhio 1893); Eibel Processing Co. v. Minnesota Ontario Paper Co., 261 U.S. 45 (USSC 1923); Tilghman v. Proctor, 102 US 707 (USSC 1881). Accidental disclosure requires that there be a pertinent factual disclosure made that is relevant to the invention.

CONCLUSION

Claims 1, 8-13 and 19 are in conformance with the requirements of 35 USC 112, second paragraph, and are patentable over Kirkpatrick in view of 35 USC 103(a) and are in condition for allowance. The decision of the Examiner finally rejecting claims 1, 8-13 and 19 should be reversed, and such action is earnestly solicited.

Respectfully submitted



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CLAIMS ON APPEAL

1. An earthquake resistant structure comprising:

a construction block having an upper surface and a lower surface and sides surfaces;

aggregate pieces within said block lower extent adjacent to said lower surface and forming the major extent of said lower surface;

said aggregate pieces each having a circumference in excess of 5 cm and being in direct firm contact with one another;

said aggregate pieces extending from and between said construction block sides;

said aggregate pieces held in contact with each other by mortar above said aggregate pieces so that said construction block provides a strong support for vertical forces applied to said upper surface and a strong resistance to horizontal vibrations of an earthquake applied to said side surfaces by transfer forces directly from one aggregate piece to another throughout said construction block lower extent.

8. An earthquake resistant structure as in claim 1 wherein:

said aggregate pieces are of a low quality material.

9. An earthquake resistant structure as in claim 8 wherein:

said aggregate pieces are slag.

10. An earthquake resistant structure as in claim 8 wherein:

said aggregate pieces are crushed stone.

11. An earthquake resistant structure as in claim 8 wherein:

said aggregate pieces are concrete chips.

12. An earthquake resistant structure as in claim 8 wherein:

said aggregate pieces are Sirasu.

13. A process for forming construction blocks to resist earthquakes comprising:

providing a mold having an upper extent and a lower extent in the desired shape of a construction block;

placing aggregate pieces having a circumference in excess of 5 cm. within said mold lower extent;

positioning said aggregate pieces within said mold lower extent so that said aggregate pieces are in firm contact with said mold sides and in firm contact with each other throughout said mold to form a lower surface;

pouring mortar over said positioned aggregate pieces so as to maintain their position and form an upper surface and form a block having a strong resistance to vertical forces applied to said upper surface and a resistance to horizontal vibrations of an earthquake by transferring forces applied directly from one aggregate piece to another;

removing said block from said mold.

14. A process for forming construction blocks as in claim 13 including:

forming said block in the shape of a parallelepiped;

placing a plurality of said blocks in side by side contacting relationship such that said

aggregate pieces in one block contacts said aggregate pieces in an adjacent block so that horizontal force applied to one said block is transferred directly from said aggregate pieces in said one block to said aggregate pieces in said adjacent block.

15. A process for forming construction blocks as in claim 14 including:

forming said blocks into the shape of an arch such that said blocks abut each other at their intrados ends and are spaced from each other at their extrados ends;
filling a space at said extrados ends with concrete to hold said blocks in place.

16. A process for forming construction blocks as in claim 13 including:

forming a support structure in the shape of an arch;
placing said mold on one end of said support structure;
forming said block in place on said support structure;
curing said mortar on said supporting structure;
removing said mold and using it to form another said block adjacent to said previously formed block to manufacture said blocks adjacent to one another with said aggregate pieces of one said block in contact with said aggregate pieces of an adjacent said block.

19. A process for forming construction blocks as in claim 13 including:

selecting said aggregate pieces from a low quality material.

March 18, 1924.

E. H. KIRKPATRICK

1,487,578

BLOCK

Filed April 14, 1922

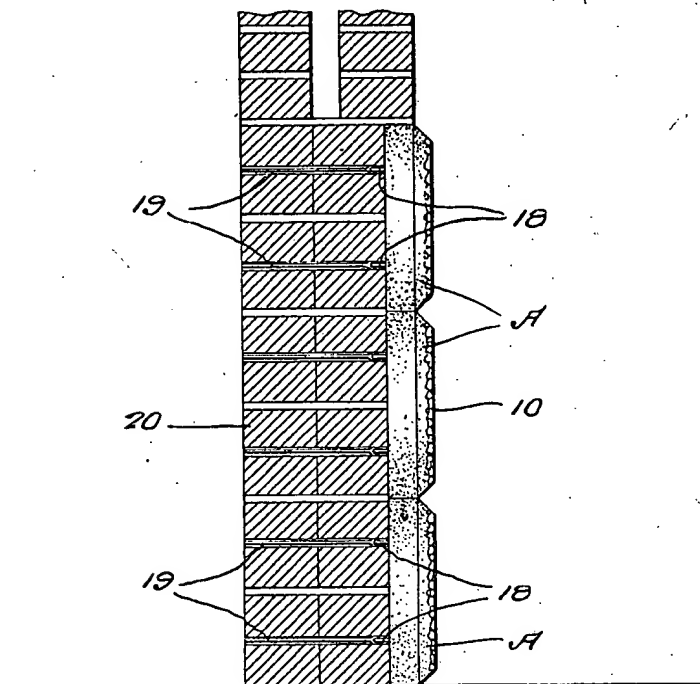
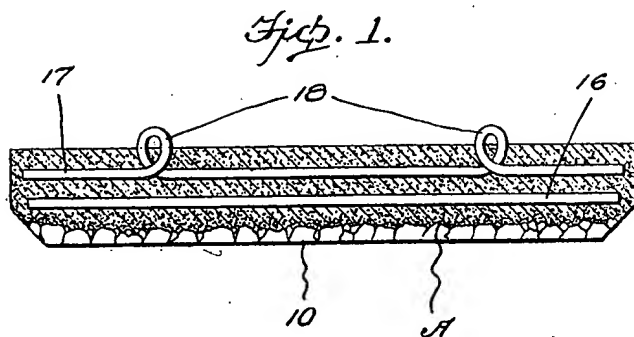


Fig. 2.

Paul W. Hunt
E. Yeager
WITNESS:

E. H. Kirkpatrick
INVENTOR
BY *Victor J. Evans*
ATTORNEY

UNITED STATES PATENT OFFICE.

EMERSON H. KIRKPATRICK, OF FORT COLLINS, COLORADO.

BLOCK.

Application filed April 14, 1922. Serial No. 552,492.

To all whom it may concern:

Be it known that I, EMERSON H. KIRKPATRICK, a citizen of the United States, residing at Fort Collins, in the county of Larimer and State of Colorado, have invented new and useful Improvements in Blocks, of which the following is a specification.

This invention has for its object, the provision of a building block, which is provided with a crushed rock veneer face or the like, and provided with reinforcing elements to afford the block maximum strength, one of which elements is especially formed or designed to accommodate a tie wire for holding the blocks in position.

The nature and advantages of the invention will be better understood when the following detailed description is read in connection with the accompanying drawings, the invention residing in the construction, combination, and arrangement of parts as claimed.

In the drawings forming part of this application, like numerals of reference indicate similar parts in the several views, and wherein:—

Figure 1 is a longitudinal sectional view through one of the blocks showing the arrangement of the reinforcing elements.

Figure 2 is a vertical sectional view taken through a wall, partly constructed with the blocks forming the subject matter of this invention.

Referring to the drawings in detail, A indicates a block constructed in accordance with the present invention, the block being constructed of cement or the like and provided with a crushed rock veneer face 10. The block may be of any dimension without departing from the spirit of the invention.

The crushed rock or the like is placed in a form, and the crevices between the rocks are filled with smaller rocks, after which the cement is poured into the form. The reinforcing element 16 is arranged in the cement to extend longitudinally of the block and immediately adjacent the veneer face, while the reinforcing element 17 is also embedded in the cement in spaced parallel relation to the element 16. However, the element 17 is formed to provide spaced eyes or loops 18 which project from the rear face of the block to accommodate tie wires or the like 19. When the block is removed from the form, it requires no washing or any further work, and it is ready to be placed upon the wall 20 as shown in Figure 1. The tie wires 19 are passed through the eyes 18 of the reinforcing element above referred to, and the blocks effectively held in position upon the wall as shown.

While it is believed that from the foregoing description, the nature and advantages of the invention will be readily apparent, I desire to have it understood that I do not limit myself to what is herein shown and described, and that such changes may be resorted to when desired as fall within the scope of what is claimed.

What I claim is:—

The combination with a building block having a crushed rock veneer face, of spaced reinforcing elements embedded in the block and extending longitudinally thereof, one of the elements being formed with eyes which project beyond one face of the block for a slight distance and tie rods provided with eyes coacting with the first mentioned eyes for holding the blocks in walled formation.

In testimony whereof I affix my signature.
EMERSON H. KIRKPATRICK